City of Dixon

# DOWNTOWN REVITALIZATION PLAN VOLUME 2 of 2

Overview of Existing Conditions
Preliminary Economic/Market Analysis
Seismic Retrofit Analysis
Appendices

May, 1996

Prepared by:

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# City of Dixon

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**Overview of Existing Conditions** 

# V. Overview of Existing Conditions

The City of Dixon is located on a broad alluvial plain in the western Sacramento Valley about 10 miles southwest of the City of Davis and about 30 miles northeast of the San Francisco Bay area. The area surrounding Dixon is predominantly level farmland on the rich alluvial soils that characterize northeast Solano County. This agricultural setting proves a rich historical context for the downtown.

The climate in the Dixon area is semi-arid, with hot, dry summers and cool winters when most of the annual of rainfall occurs. Warm summer evenings are conducive to outdoor events, such as a farmers market, concerts and festivals that add excitement and vitality to the downtown. At the same time, heat during the day can be uncomfortable so that elements such as awnings, trees and vine-covered trellises that create inviting shelter from the sun should be considered in the design of public spaces and private development.

The downtown is a developed urban environment in which most (if not all) of the native plants and animals have been supplanted by non-native varieties. Street trees and landscaping consist of mostly introduced species; few of the native valley oaks or other indigenous species remain.

#### **Existing Land Use**

Within the downtown commercial core near the intersection of "A" Street and First Street, existing land use consists primarily of small, older commercial buildings with parking located nearby. Businesses are an eclectic mix of retail, banks, restaurants and a few offices.

Surrounding the commercial core is a mix of single- and multi-family residential development on lots ranging in size from about 6,000 to 8,000 square feet. Public and quasi-public land uses bordering the study area to the east and south include Anderson Elementary School, Dixon High School, Hall Memorial Park and Dixon May Fair; the Women's Improvement Club Park is located at the corner of North First Street and East "C" Street in the downtown itself.

The Southern Pacific Railroad right-of-way crosses the study area in a northeast-southwest direction. There are two at-grade street crossings of the railroad at West "A" Street and First Street that connect the east and west portions of the study area, as well as a pedestrian crossing at West "B" Street.

Existing land use in the downtown core area is summarized by Table V-1.

Table V-1: Summary of Existing (1995) Land Use In The Downtown Core Source: CMS, 1995				
Land Use	Approximate Area (acres)	% of Study Area		
Residential	2	14%		
Commercial	23	63%		
Light Industrial	3.5	23%		
Total Area	60	100%		

#### **General Plan Designations**

The Dixon General Plan (adopted in 1993) provides goals, policies and programs to guide land use within the study area consistent with the overall objectives for the continued development of the City. Existing General Plan land use designations are shown by Figure 2. The General Plan designates land within the study area for commercial development under the *Downtown* land use category. The area surrounding the downtown is designated *Medium Density (Low) Residential*, with densities ranging from about 6 to 14 dwelling units per acre.

The Dixon Downtown Revitalization Plan is intended to be consistent with, and help implement, the Dixon General Plan, which encourages the preservation and enhancement of the downtown while maintaining the City's small town character.

#### Zoning

The Dixon Zoning Ordinance provides site-specific development and use regulations that govern the size, shape and intensity of development in the downtown, and the uses to which new development may be committed. Applicable zoning districts for the study area are shown by Figure 3.

Table V-2 summarizes the general development standards for selected zones.

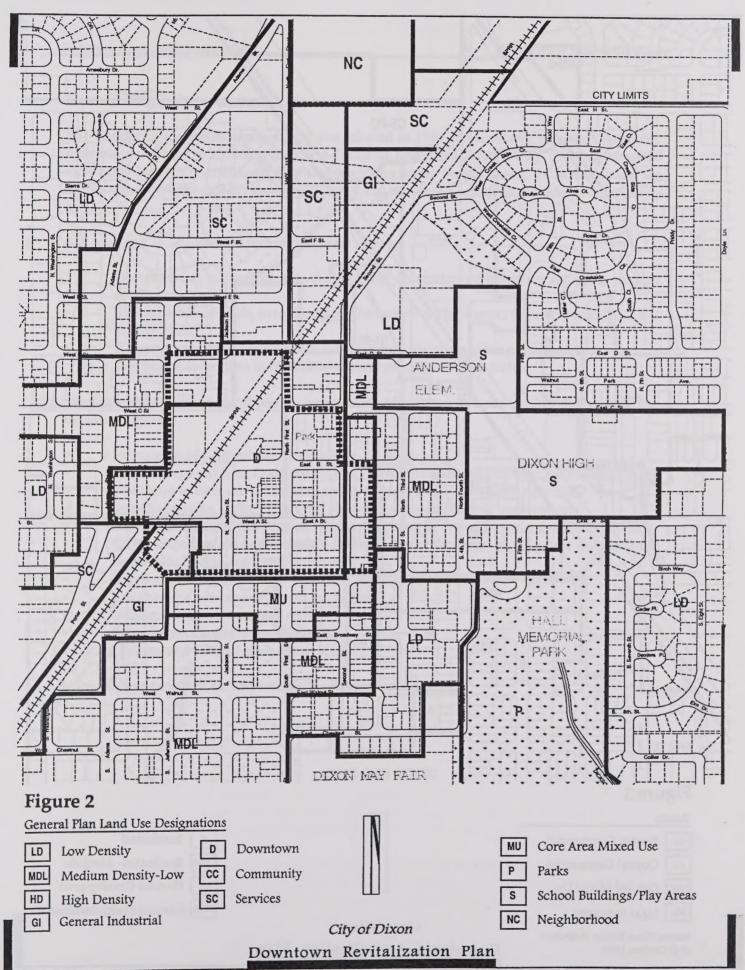
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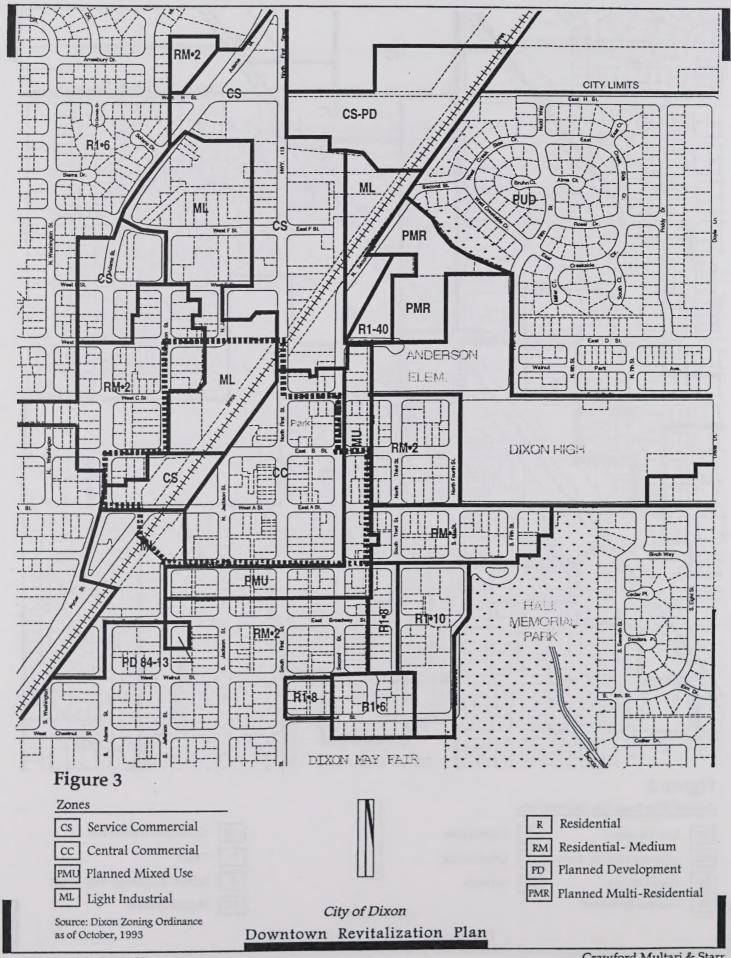
# Table V-2: Development Standards for Selected Zones

Source: Dixon Zoning Ordinance, 1994

Development Standards	PMU, Planned Mixed-Use	ML, Light Industrial	CS, Service Commercial	CC, Central Commercial
Minimum Lot Area (sq.ft.)	5,000	20,000	7,000	None
Street Yard Setback	15 feet	10 feet	None	None
Side Yard Setbacks	5 feet	None	None	None
Rear Yard Setbacks	10 feet	10 feet	None	None
Coverage	No standard	40%	No standard	No standard
Max. Building Height	36 feet or three stories	40 feet	40 feet	50 feet

Note: Additional regulations may apply. Interested parties should consult the Dixon Zoning Ordinance and the City Planning Department for more specific requirements.





#### Central Dixon Redevelopment Plan

The Central Dixon Redevelopment Plan was adopted in 1987 in accordance with the Community Redevelopment Law (§ 33000, et seq of the California Health and Safety Code). The purpose of the redevelopment plan is to alleviate blighting conditions within central Dixon; the boundaries of the redevelopment project area are shown on Figure 4 and include the downtown revitalization plan study area.

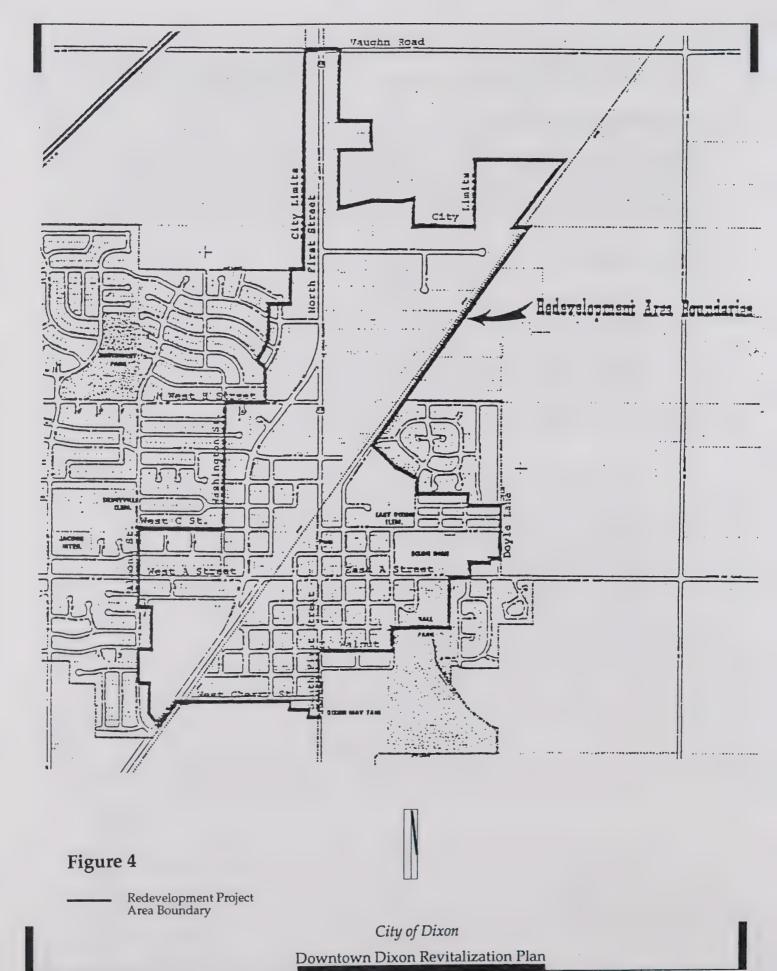
The problems to be addressed by redevelopment include:

- Buildings that suffer from age, obsolescence, deterioration dilapidation and faulty exterior spacing;
- The existence of small, irregular shaped lots which are inadequate for proper usefulness and development;
- The existence of inadequate public infrastructure, including parking and circulation;
- The lack of investment in the downtown, and general economic decline.

The Agency has adopted a list of potential projects to address the concerns described above, including the following:

- Preparation of a Downtown Design Plan.
- Establishing a revolving fund to be used for the rehabilitation and retrofitting of buildings in the downtown to meet current building codes, and to improve earthquake resistance.
- Installing paying, curbs, gutters and sidewalks to complete street improvements.
- Installing landscaping and other amenities to help beautify central Dixon and attract investment.
- Other infrastructure improvements including the replacement of old sewer lines and the installation of drainage systems.
- Improving the appearance of 'gateways' into downtown Dixon.
- Developing a senior center/multi-use facility.
- Undergrounding of overhead utilities.
- Preparation of a downtown parking plan.
- Constructing railroad grade separations.

Many of these programs are addressed in the Revitalization Plan.



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#### **Urban Form**

#### Parcelization and Development Pattern

Downtown Dixon has been developed around a grid system of streets with mostly square blocks of about 200 feet on a side; mid-block alleys are provided generally south of "A" Street. Commercial lots in the downtown vary in size, but most are between 3,000 to 5,000 square feet. There are exceptions, such as the south-east corner of "A" Street and First Street, where the lots have been consolidated to form a single building site of over one-quarter acre.

Commercial development along First Street is generally one and two stories and constructed with the building face at the back of the sidewalk. Parking is provided on the street and in lots located behind the buildings.

The residential neighborhoods surrounding the downtown exhibit the same general block and lot pattern, except that the parcels are generally larger (about 7,500 square feet).

#### Architecture

Commercial buildings in the downtown tend to be older; many are from the early part of the century and display a wide range of architectural styles and materials; most are wood frame or masonry with plaster or stucco exterior and flat roofs. Colors are generally muted earth tones.

There are a number of unreinforced masonry buildings within the downtown, primarily along First Street between "A" Street and "B" Street. Some of these buildings are considered historic and date to the early 1900's; several buildings in the downtown meet criteria for inclusion on the national Register of Historic Places by virtue of their age (50 years or more) and distinct architectural character (see also Figure 5 and Appendix A).

Store fronts consist of standard fixed-pane display windows with aluminum or wood frame systems and a short bulkhead underneath. Some of the stores have awnings that extend over the sidewalk.

#### Other Issues Facing the Downtown

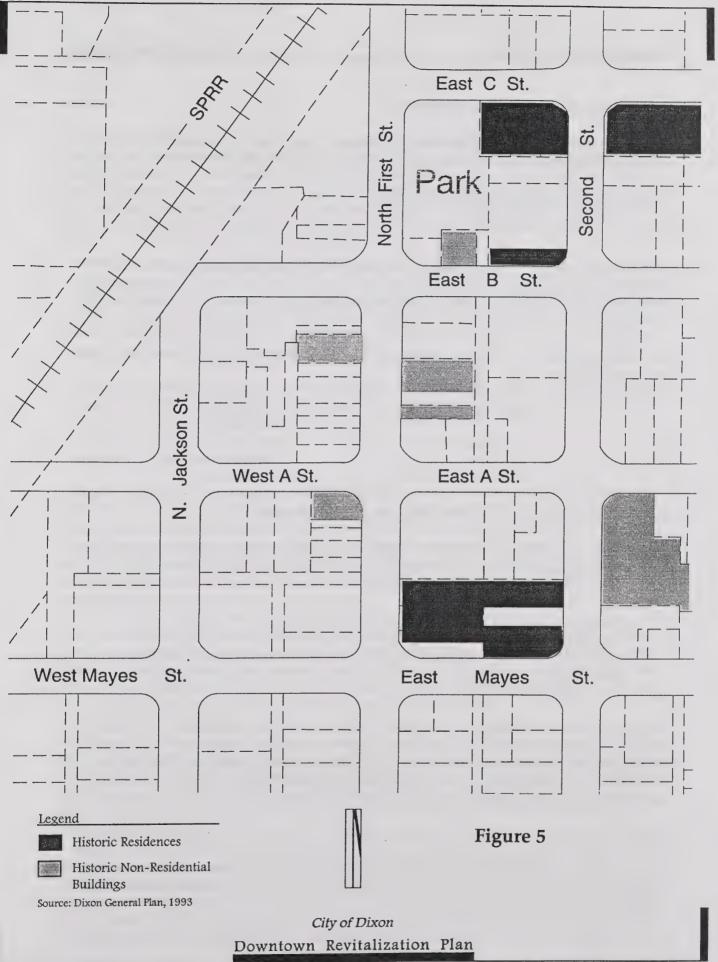
#### **Railroad Crossings**

The Southern Pacific Railroad right-of-way crosses the project area in a northeast to southwest direction. There are presently two, at-grade street crossings of the railroad, one on First Street north of "C" Street, and the other on "A" Street, as well as a pedestrian crossing at West "B" Street. The limited number of crossings provides an impediment for travel between the study area and the remainder of the City which lies to the north and the west. Moreover, at-grade crossings are more hazardous for vehicles and pedestrians, and become completely blocked for short times when a train passes.

There has been considerable discussion among civic leaders and the public about the possibility of constructing grade separations for either First Street and/or "A" Street so that vehicles and pedestrians pass underneath the railroad. While this would solve many of the access and public safety problems, it would be quite expensive.

#### Vacant Buildings

Within the Downtown area, a large amount of commercial space is currently vacant, particularly on the second floor. The high number of vacancies adversely impact the City by reducing revenues from sales and property taxes. In the long run, these conditions may foster deterioration in areas that are currently stable, further aggravating the problem.



#### **Assessment of Public Improvements**

This section discusses the current condition of public improvements in the plan area, including roads, streetscape improvements, parking, water and sewer lines and storm drain facilities.

#### Circulation System Serving the Plan Area

#### **Streets**

The Downtown is served by a grid system of local streets, with First Street (State Route 113) and "A" Street serving as the principal connections among the Downtown, the I-80 freeway, and the remainder of the City. The I-80 freeway is a major east-west interstate highway connecting the Bay Area with Sacramento

The Circulation Element of the *General Plan* assigns roadway classifications to the streets serving the downtown, as follows:

Street	Classification		
First Street	Principal arterial		
"A" Street	Minor arterial		
"C" Street and others	Local collector		

The Circulation Element defines each roadway classification as follows:

Arterials are the major thoroughfares within the City and are used to expedite through traffic movement. Right-of-way widths are usually about 100 feet and may have daily traffic volumes that exceed 20,000 vehicles.

Collector roads serve traffic movements in defined geographic areas of the City and connect these areas with arterials and local roadways. There are few through traffic trips; most traffic uses a collector to move from a lower order street to a higher order street. The right-of-way width is usually about 60 feet and traffic volumes average less than 10,000 vehicles per day.

An often-used indicator of the ability of a roadway or intersection to accommodate traffic is Level of Service, which sets a standard based on a scale from LOS "A", free-flow conditions, to LOS "F", which refers to unstable conditions approaching gridlock. The Circulation Element considers a Level of Service "D" to generally be acceptable for short periods during peak hours. At present, all of the streets and intersections serving the downtown are operating at Level of Service "A".

Many of the streets surrounding the Downtown have not been improved to their full width with pavement, curbs, gutters and sidewalks; in many cases, the asphalt is in need of repair. These deficiencies result in drainage problems during periods of stormy weather. Several City streets in the downtown area have large segments that are unpaved, such as "D" Street, Adams (north of West Walnut), and Washington Street.

#### **Bicycles**

The viability of bicycling as an alternative to motor vehicle use depends on a number of factors, including the proximity of residences to likely destinations, traffic volumes, safety on local roads, the topography of the area, and the weather. Within the City and the downtown, bike paths are encouraged, especially for school children. Transportation Development Act (TDA) funds have been requested for a project along North First Street to construct additional bike lanes. A longer-term project is an inter-city bike path parallel to the Southern Pacific Railroad between the cities of Davis and Vacaville.

#### Streetscape Improvements/Pedestrian Circulation

Streets in the downtown are generally 45-50 feet wide, with curbs, gutters and sidewalks in most areas. Street trees are provided sporadically in the blocks surrounding First Street; street lights on tall light standards are provided along the commercial streets. Other furnishings, such as trash receptacles, are also provided.

Magnolia trees have been installed as street trees along First Street. Magnolias are disliked by some because they tend to produce litter (leaves, flower buds, etc.), and tend to be very thick and shady and tend to block visibility of signs and stores.

#### Vehicular Circulation Analysis

Currently, access to the downtown core is provided primarily by "A" Street running east-west from I-80 and by First Street (or S.R. 113) running north-south, also connecting to I-80 in the north. There are atgrade railroad crossings entering the downtown from either of these routes which create traffic flow and access problems, especially for fire, police and other emergency vehicles. At present, the feasibility of various underpass alternatives at the North First Street crossing is being studied. The results of this study have not been finalized; therefore any recommendations for the downtown should be flexible to help insure consistency with the findings of this study.

A secondary commercial corridor (essentially a downtown bypass) exists along North Adams Street. Construction will begin soon on a realignment of the North Adams Street/H Street/ First Street intersections which will simplify and improve the circulation at these locations. It is recommended that the median triangle created by the convergence of these three streets be designed as an entry to the downtown core with signage to facilitate the flow and circulation into town.

First Street, which is a State highway, experiences heavy truck traffic throughout the day and evening hours which impacts the potential uses for the downtown and inhibits auto and pedestrian circulation. As a State highway, First Street falls under the jurisdiction of Caltrans. As such, parking or circulation modifications may be limited. It is recommended that the City of Dixon continue to pursue the relocation of truck traffic to Pedrick Road as a first priority, and secondarily, to pursue a long range realignment of S.R. 113 to Pedrick Road.

Design and improvement recommendations included in the Downtown Revitalization Plan will not greatly intensify uses or increase circulation in the downtown core beyond the capacity of streets and intersections serving the area. The proposal to make "B" Street and Jackson Street one-way from First Street through to "A" Street will not significantly alter the capacity of these two streets. Delivery access to Dixon Hardware and Lumber must be maintained, however. If these two streets become one-way,

parking will be increased and the potentially hazardous left turn from Jackson Street would be eliminated, thus improving circulation on a local level.

The proposal to close "C" Street between First Street and Second Street in order to enlarge the Women's Improvement Club Park would most likely increase traffic on "B" Street. It would, however, alleviate a grade change problem at the "C" Street and First Street intersection if and when the railroad underpass is constructed on North First Street. It will be necessary to perform a more detailed traffic analysis of that area before closing "C" Street.

Another factor to be considered is the effect of additional development on traffic and circulation in the downtown. Additional traffic generated by buildout of the General Plan could increase traffic through the Downtown, especially on First Street. While the additional traffic will result in greater exposure for downtown businesses, it may necessitate improvements to the intersection of First Street and A Street to maintain an acceptable level of service.

One option being considered to handle the increase in traffic is the addition of turn lanes on First Street and A Street and the installation of a traffic signal. These improvements would require the elimination of some on-street parking spaces near the intersection, and would also preclude the installation of bulbouts at the First Street/A Street intersection. The turn lanes would enable the intersection to operate more efficiently and with improved safety. Signalized intersections with turn lanes are a common feature in downtowns and should not significantly interrupt the pedestrian character of the area, if this approach is implemented. The premature loss of on street parking could adversely affect existing businesses, and the loss of any significant number of on-street spaces should be replaced. Furthermore, parking along both "A" and First Streets is important not only for customer convenience but also to protect the pedestrian environment on the sidewalks. (See also Policy 32.)

The Revitalization Plan should be flexible in its consideration of new circulation and parking alternatives regardless of whether S.R. 113 is relocated, the traffic signal and turn lanes are installed, the railroad underpass is constructed, or the train depot is completed.

#### Transit Service

Dixon is currently served by a limited intercity scheduled public transit service. Readi-Ride provides door-to-door transit service within the City. City-Link provides transit to the cities of Davis, Fairfield, and Vacaville.

#### Rail Service

The Southern Pacific Railroad provides freight service to Dixon. Rail passenger service is not provided to Dixon, although passenger trains do pass through the city. There has been considerable discussion of providing a rail depot in Dixon to provide commuter service between the City, the Bay Area and Sacramento.

#### **Parking**

The success and viability of Downtown Dixon will, in part, rely upon the supply and convenience of available parking spaces. Downtown traffic and activity, at a certain level, are indicators of a healthy and vital retail/entertainment area. However, for downtown retailers to prosper, and for downtown

visitors to avoid a negative experience, it is necessary to provide adequate parking that is easy to find and located at an acceptable distance from a motorist's destination.

#### **Existing Parking Conditions**

For the purposes of this parking analysis, the Dixon downtown core is defined by the area shown in Figure 6. Existing public parking lots are shown, as well as primary on-street parking, secondary on-street parking, and areas of private off-street private parking. Future parking is shown in relation to the proposed new passenger train terminal. Table V-3 summarizes the parking inventory for the downtown core.

Within the C-C, Central Commercial district, which encompasses almost the entire study area, on-site parking is not allowed except in common parking facility sites designated by the City Council. Required parking may be satisfied by 1) entering into an agreement with the City to pay a fee for the provision of required spaces off-site, or 2) by participating in a parking assessment district approved by the Council.

The parking requirement for selected commercial uses within the C-C zone is summarized below.

Use	Parking Requirement
Offices (non-medical)	1/560 sq.ft.
Offices (medical)	1/280 sq.ft.
Retail	1/280 sq.ft.
Restaurants, Bars	1/140 sq.ft., plus 1/3 employees
Services	1/700 sq.ft.

Primary on-street parking is located along block fronts that serve mostly retail businesses. On-street parking downtown consists primarily of stalls arranged in parallel along the curb. All streets have two-way traffic and insufficient right-of-way width to maintain the two-way traffic and diagonal parking on both sides, if diagonal parking is desired. If turn lanes are provided at the First Street/A Street intersection, the resultant loss of on-street parking would be minimal (from 16 - 24 spaces).

Secondary parking is located along block fronts that are either a mix of commercial and residential or are totally residential. These blocks will receive overflow parking from the adjacent downtown retail area. All secondary parking consists of parallel spaces located on two-way streets.

Off-street parking in public lots is located in three areas, as shown in Figure 6. All spaces are unmetered and marked for 2 hour parking. None of these lots are located along the main axis streets, First Street or "A" Street, but are located within one block of either or these two streets. There is minimal signage directing motorists to these parking lots.

Off-street parking in private lots is provided in nine areas within the downtown core. These lots range from three to over thirty spaces serving employees, restaurant and retail customers, bank customers and church members. Two of these lots serve a bank and a church exclusively and provide an opportunity for "off-hours" shared parking. A number of these private parking areas are located out of public view in small, informal lots behind businesses with alley access. These spaces appear to be typically used for employee parking and are not clearly defined.

Table V-3: Downtown Core Parking Inventory				
Existing				
Primary On-Street	200			
Secondary On-Street	200			
Off-Street Public	128			
Off-Street Private	219			
TOTAL:	747			

Quantities are approximate, based on 1994 aerial survey, the 1993 Omni Means traffic study, and RRM and City of Dixon field study.

On the majority of all downtown block faces, there are very few curb cuts and driveway aprons. This is primarily due to 1) the existence of alleyways and, 2) buildings located at the back of sidewalks, precluding any parking lots or driveways in front of buildings. The result is a higher ratio of on-street parking spaces available in the primary and secondary parking areas than is normally found.

In 1983, Omni-Means, Ltd. prepared a traffic study for the City of Dixon which included a survey of existing parking conditions, a parking management plan, and a projection of future parking needs. Review of that study concludes that, in the twelve years since the analysis, the parking conditions within the downtown core have not changed significantly, with the exception of the loss of 22 informal offstreet parking spaces on the Pardi Market site. The only major new commercial development has been the City Center Mall (which is only partially occupied) and the Police Station (which has its own offstreet parking). There have been several business closures which have reduced the demand for downtown parking.

The Omni-Means study stated, with regard to existing downtown parking, that the "most significant inefficiency occurs when downtown employees use short-term parking immediately adjacent to downtown retail areas to meet their long-term needs." This situation appears to be persistent, and will continue to have a negative impact as downtown retail activity increases.

Currently there are no parking meters in the downtown area, but there is a 2-hour time limit in the primary on-street parking zones within the core area.

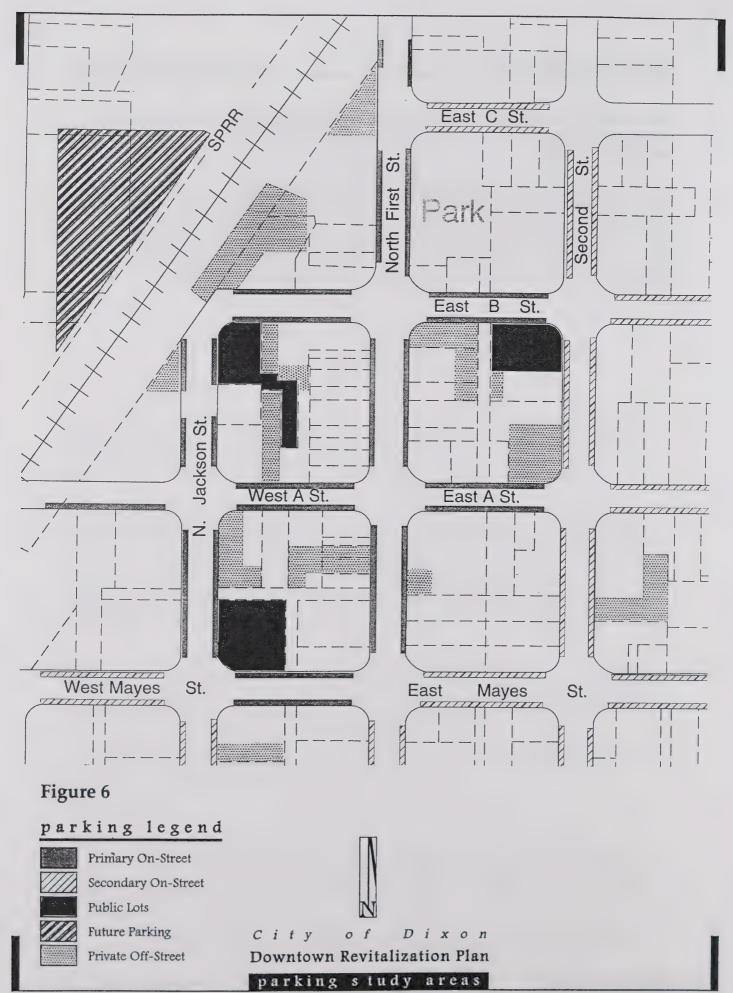
#### **Additional Parking**

The parking supply in the Downtown core is adequate for the current commercial demand. The Downtown Revitalization Plan will provide new on-street diagonal parking and off-street parking areas, as well as adequate signage to direct motorist to off-street parking. The improvement plan will also address bicycle circulation in the Downtown core which may help reduce demand for vehicular parking.

The City should consider lowering the off-street parking standards for commercial retail and restaurant uses in the downtown from the present 1 space/280 square feet. Other towns of similar size have found

a lower off-street parking standard (1 space per 500 square feet, for example) provides adequate parking and lessens the amount of land devoted to such uses, which may become limited in the downtown as new development proceeds.

A major source of new parking is shown in the master plan for the new railroad passenger terminal which includes 130 parking spaces in Phase I, and an additional 86 spaces proposed in future phases. This project will be located on the west side of the railroad tracks, adjacent to the Jackson Street and B Street corner. A pedestrian crossing would connect the new terminal with the downtown area. Even if the station is not built in the near term, the provision of additional parking in this area, with good pedestrian connection to the core, may still be beneficial for implementing the Revitalization Plan.



#### Water, Sewer, and Drainage

#### Water Distribution System

Water for domestic use and fire protection in the downtown is provided by the California Water Service Company (CWSC). The CWSC derives water from eight wells within the Dixon area. The wells have the capacity to produce about 5,760 gallons of water per minute, or about 1,349,000 gallons of water per day. The wells penetrate the Tehama Formation, a huge aquifer underlying the western Sacramento Valley. According to the General Plan EIR, the CWSC will not be adversely impacted by additional development.

#### **Sewage Collection and Treatment**

Wastewater generated in the downtown is collected by sewer lines that vary in size from 6 to 15 inches in diameter, and transported to the treatment plant located about two miles south of the City. Treatment plant capacity is not a constraint to development at present, according to City staff. However, to accommodate additional development anticipated by the General Plan will require expansion of the treatment plant and collection system. Plans for such an expansion are currently being prepared; the work is expected to be completed by the end of 1997.

#### Stormwater Drainage System

According to the General Plan, isolated areas northwest of the railroad can be inundated by a 100-year storm event; areas within the downtown are generally outside the 100-year floodplain. The absence of a comprehensive drainage system serving the downtown results in localized areas of street ponding during a severe storm. However, this is not a significant detriment to revitalization efforts.

#### **Electrical Transmission and Service Lines**

Other utilities, including phones, cable TV, natural gas lines, appear to be adequately sized to serve continued development within the Downtown. Portions of the downtown, as with other older areas of Dixon, are served by overhead utility lines.

Preliminary Economic / Market Analysis

# VI. Preliminary Economic/Market Analysis

#### Introduction

The purpose of this preliminary economic/market analysis is to provide information that may be useful in determining the types of development that may be attracted to downtown Dixon. Based on demographic and expenditure data, unfulfilled needs and opportunities are identified, and realistic market "niches" for the downtown are suggested. Although the focus of the analysis is on the revitalization opportunities in the commercial sector of downtown, other areas are addressed, including housing, office space, and light industry. The analysis includes a discussion of sales leakage, local development potential, and regional trends that may affect the opportunities for business growth downtown. It should be emphasized that this analysis is preliminary in nature, and as revitalization opportunities are identified, more detailed market analyses and financial feasibility studies may be required for specific development proposals.

#### Trade Area

The first step in an economic/market analysis is the determination of a trade area for downtown Dixon. The trade area is the geographical region from which a business or commercial district draws the majority of its customers. The concept is based on a general assumption that, all things being equal, people will travel to the nearest facility for goods and services. Therefore, rules of thumb suggest that trade area boundaries be based on the length of time required for potential customers to reach the business district. Two notable exceptions to this rule are freeway travelers, and tourists traveling to "special places."

Typically, trade areas are comprised of primary, secondary, or tertiary zones. Primary zones have been defined as areas not requiring more than about a ten minute drive and generally lie within three to five miles of the commercial district. Industry estimates suggest that about 60 to 70 percent of sales are realized from the population within this area. The balance of the sales volume comes from secondary and tertiary zones for which the business or commercial district is less readily accessible. Secondary zones are areas that lie within 15 to 20 minutes driving time and generally are within three to seven miles of the commercial district. Tertiary areas are all areas beyond the secondary zone that may generate dollars to the commercial district due to a lack of competing facilities in that zone or because of convenient access. This area may extend 15 miles in major metropolitan markets and as far away as 50 miles in smaller, more rural places.

Based on a three mile radius, drawn from the intersection of First and "A" Streets (the heart of the downtown commercial core), the primary zone for downtown would include the City of Dixon and some of the rural areas on the fringe of the City. The secondary trade area for the City extends about five miles from the commercial core and captures not only the residents of the City, but also includes a large portion of the rural area surrounding the City. The tertiary trade area for downtown is defined as those areas outside a five mile radius from the core. For purposes of this analysis, we are focusing on the City of Dixon as the primary trade area. However, as market niches for downtown are identified, the generation of interest in the secondary and tertiary trade areas could have a significant impact on the revitalization efforts.

#### **Demographic Data**

Since the people living in the trade area are the potential patrons of the downtown, it is useful to know something about them. This section examines the City's demographic profile to help identify possible trends in the community relevant to the downtown. While the primary focus is on population and income data, other data including age, education, household size, employment and commuting patterns are summarized.

#### **Population**

Historical population growth for the City of Dixon is shown in Table VI-1. As the table shows, the City experienced the largest growth in population from 1970 to 1980, increasing by 3,901 residents or about 5.5% annually. From 1980 to 1990, the population in the City increased by 2,890 residents, an annual rate of about 3.3%. Thus far in the 1990's, the population has increased by about 2,031 residents and the annual growth rate has been about 4.6%.

Table VI-1: City of Dixon - Population Growth 1970 to 1994						
Year Population Increase						
1970	4,432	49.2%				
1980	7,541	70.1%				
1990	10,401	37.9%				
1994	12,431	19.5%				

Source: Dixon General Plan, California Department of Finance

From 1980 until 1994, the population grew at an annual rate of about 3.6%. If we assume that the population will continue to grow at a similar rate, the City could reach a population of about 15,400 by the year 2,000 and a population of about 22,000 by the year 2010, although the enactment of Measure B (see below) may result in a lower buildout population. Although future population growth cannot be predicted with certainty, these estimates seem reasonable when compared to estimates in the City's General Plan, although they are slightly higher.

The General Plan assumes that the City will grow at a rate similar to that experienced since the passage of Measure "B" in 1986. Measure "B" limits the development of residential units for any given year to three percent or less of the total number of housing units that existed within the City on December 31 of the previous year.

In addition to population estimates by the City, the Association of Bay Area Governments (ABAG) also generates population projections. Table VI-2 shows ABAG estimates for the City's population to be about 15,100 by the year 2,000 and about 17,900 by the year 2010. These estimates appear to be conservative when compared to the historical growth rates for the City.

Table VI-2: Population Projections for the City of Dixon and Solano County					
Year	Year Dixon Solano County				
1995	13,000	395,600			
2000	15,100	454,700			
2005	16,700	507,200			
2010	17,900	546,800			

Source: Association of Bay Area Governments

#### Household Size

In 1980, U.S. Census data shows that the City had 2,426 households, up 78.4% from the 1970 total. By 1990 the number of households in the City had increased to 3,386, a 39.5% increase over the 1980 total. The 1980 average household size was about 3.10. In 1990, the average household size had decreased slightly to about 3.07 persons per household. The City's 1990 household size was slightly higher than the County as a whole, which had a household size of 3.00 per household.

#### **Income Distribution**

The following table outlines the U.S. Census income distribution for Dixon and for Solano County. As the table shows, the City has a smaller percentage of households in the lower income groups, and a higher percentage of households in the middle income groups compared to the County as a whole. However, the County has a slightly larger percentage of households in the higher income brackets.

Table VI-3: Income Distribution by Household						
Income Level	1990 Dixon	% of Total	1990 Solano County	% of Total		
Less than \$5,000	64	1.9%	2,998	2.6%		
\$5,000 - \$9,999	170	5.0%	6,565	5.8%		
\$10,000 - \$14,999	154	4.5%	6,971	6.1%		
\$15,000 - \$24,999	528	15.6%	15,642	13.8%		
\$25,000 - \$34,999	645	19.0%	16,940	14.9%		
\$35,000 - \$49,999	815	24.1%	25,272	22.2%		
\$50,000 - \$74,999	668	19.7%	26,075	22.9%		
\$75,000 - \$99,999	219	6.5%	8,872	7.8%		
\$100,000 - \$149,999	68	2.0%	3,394	3.0%		
\$150,000 or More	55	1.6%	908	0.8%		

The median income for the City increased form \$20,170 in 1980 to \$36,710 in 1990, an increase of about 82%. While a large portion of the increase in median income can be explained by inflation, there appears to be a growth in real income for the area. If the 1980 median income were inflated by the Consumer Price Index, a standard method of accounting for the effects of inflation, the resulting figure would be about \$33,140. Since the 1990 median income is higher than this figure, it appears that the City has experienced an increase in real purchasing power.

The per capita income for the City increased from \$7,013 in 1980 to \$13,984 in 1990, an increase of about 99.5 %. Once again, some of this increase reflects growth in real purchasing power and not simply a result of inflation.

#### Age

The following table shows the age distribution of Dixon for 1980 and 1990, and the 1990 distribution for Solano County. As the table shows, the age distribution has changed significantly from 1980 to 1990. In general, the City has experienced a decline in the percentage of the population in the under 30 age brackets, and has experienced an increase in the percentage of the population in the 30 and older age brackets. The trend in the age distribution can be attributed to the aging of the "baby boomers," those persons born in the 1950's and early 1960's.

However, in comparison to the age distribution of the County as a whole, the City has a higher percentage of the population below the age of 19; a lower percentage of persons in the 20-29 age bracket; and comparable percentages of persons in the 30 and older age brackets.

Table VI-4:
Age Distribution

Age	1980 Dixon	% of Total	1990 Dixon	% of Total	Solano County	% of Total
Under 5 years	769	10.1%	924	8.9%	29,652	8.7%
5 - 9 years	681	9.0%	993	9.5%	28,870	8.5%
10 - 14 years	675	8.9%	856	8.2%	25,578	7.5%
15 - 19 years	726	9.6%	754	7.2%	22,833	6.7%
20 - 29 years	1422	18.9%	1,534	14.7%	56,717	16.7%
30 - 39 years	1184	15.7%	1,970	18.9%	65,533	19.3%
40 - 49 years	750	9.9%	1,390	13.4%	45,976	13.5%
50 - 59 years	587	7.8%	891	8.6%	26,951	7.9%
60-64 years	241	3.2%	287	2.8%	10,432	3.1%
65 years and older	506	6.7%	802	7.7%	27,879	8.2%
Total	7541	100.0%	10,401	100.0%	340,421	100.0%

#### **Employment**

The following table outlines the major occupations of the residents of Dixon and Solano County. The table shows that the distribution of employment in the City does not differ significantly from the distribution in the County. The table shows that over one half of the working population is employed in one of six general categories: executive, administrative, and managerial; professional specialty; sales; administrative support (including clerical); service; and precision production, craft and repair.

Table VI-5: Employment by Occupation - Workers 16 and Over

Occupation	Dixon	% of	Solano	% of
Executive, Administrative, and Managerial	602	12.5%	18,150	12.0%
Professional Specialty	498	10.4%	18,446	12.2%
Technicians and Related Support	242	5.0%	6,382	4.2%
Sales	541	11.3%	18,224	12.0%
Administrative Support including Clerical	750	15.6%	25,792	17.0%
Private Household	0	0.0%	481	0.3%
Protective Service	100	2.1%	4,311	2.8%
Service	481	10.0%	16,785	11.1%
Farming, Forestry, and Fishing	254	5.3%	2,997	2.0%
Precision Production, Craft and Repair	624	13.0%	21,195	14.0%
Machine Operators, Assemblers, and Inspectors	248	5.2%	6,306	4.2%
Transportation and Material Moving	194	4.0%	5,839	3.9%
Handlers, Equipment Cleaners, Helpers, and Laborers	271	5.6%	6,402	4.2%

In addition to the employment by occupation information presented above, Table VI-6 outlines the major industry by employment for both the City and the County. Of note is the high percentage of residents employed in educational services compared to the total for the County. This may be a result of the City's close proximity to the UC Davis campus.

Table VI-6: Employment by Industry - Workers 16 and Over

Industry	Dixon	% of Workforce	Solano	% of Workforce
Mining	0	0.0%	376	0.2%
ryming	0	0.078	370	0.270
Construction	349	7.3%	11,187	7.4%
Manufacturing, non-durable goods	406	8.5%	8,465	5.6%
Manufacturing, durable goods	197	4.1%	10,714	7.1%
Transportation	254	5.3%	9,516	6.3%
Communications and Other Public Utilities	128	2.7%	4,482	3.0%
Wholesale Trade	151	3.1%	4,526	3.0%
Retail Trade	1,057	22.0%	28,586	18.9%
Finance, Insurance, and Real Estate	265	5.5%	10,517	7.0%
Business and Repair Services	101	2.1%	6,952	4.6%
Personnel Services	45	0.9%	3,845	2.5%
Entertainment, and Recreation Services	32	0.7%	2,224	1.5%
Health Services	310	6.5%	13,504	8.9%
Educational Services	593	12.3%	9,961	6.6%
Other Professional and Related Services	234	4.9%	8,552	5.7%
Public Administration	346	7.2%	14,704	9.7%

#### **Commuting Patterns**

The following table presents the commuting patterns of the workers in Dixon and Solano County. The table shows that the City has a larger percentage of employed workers who drive alone to work and a lower percentage of carpooling workers than the County. Since Dixon is not currently served by regularly scheduled public transit, the percentage of commuters using that form of transportation is lower than the County as a whole.

Table VI-7: Commuting Patterns			
Mode of Transit	Percentage of Employed Workers Dixon	Percentage of Employed Workers Solano	
Drove Alone	81.7%	72.0%	
Carpools	12.4%	18.5%	
Public Transportation	0.1%	2.3%	
Walked or Worked at Home	4.4%	5.1%	
Other Means	0.8%	1.5%	

In addition to the mode of transit, the following table examines the travel time to work for residents of both the City and County. As the table shows, only about 32.9% of the working residents of Dixon have commutes of 15 minutes or less. Of the remaining commuters, most have commuting times of ranging between 15 - 29 minutes, but about 31.6% of the working residents have commutes in excess of 30 minutes. Given the small geographic size of the City, this table suggests that the majority of workers in Dixon are commuting to jobs outside of the City boundaries.

Table VI-8: Travel Time to Work				
Travel Time	# of Workers - Dixon	% of Working Population	# of Workers - Solano	% of Working Population
Less than 5 Minutes	215	4.5%	4,442	2.8%
5 to 14 Minutes	1,364	28.4%	43,138	27.2%
15 to 29 Minutes	1,706	35.5%	44,622	28.1%
30 to 44 Minutes	797	16.6%	24,771	15.6%
45 to 59 Minutes	250	5.2%	14,746	. 9.3%
60 Minutes or More	361	7.5%	22,814	14.4%
Worked at Home	111	2.3%	4,180	2.6%

Source: 1990 U.S. Census Bureau

#### **Summary of Demographic Data**

The following summary examines the relationship of demographic data to downtown revitalization efforts. Based on historical data and growth restrictions resulting from Measure "B", the City's population is estimated to grow at an annual rate of about 3-4% for the next several years. However, if the restriction on the construction of residential units is lifted, market forces could drive the population growth at an even faster rate. An increasing population (coupled with leakage in the retail sector described in the following section) creates an expanding market for the downtown area and makes the City an attractive business location.

In addition to an increasing population base, the median household income for the City increased faster than inflation from 1980-1990 signaling a possible increase in real purchasing power for the residents of the City. This growth in real purchasing power means that residents may have more discretionary income to spend on goods and services. As a result, new businesses may be enticed to the City or existing businesses may expand their operations to accommodate the increased demand.

The age distribution shows that despite reductions in the younger age groups since 1980, a large percentage of the population is still under the age of 19. Based on this data, revitalization strategies should includes uses that cater to this younger market and capitalize on the proximity of the local high school to the downtown.

Finally, the majority of Dixon residents commute out of the City for employment and typically are driving alone to their place of employment. This large commuter base could make a good case for locating a commuter rail station in the center of town. A rail stop would increase the activity downtown and increase the visibility of businesses located there. In addition, some consideration should be given to providing employment opportunities within the downtown area as part of the revitalization efforts. Based on the Census data, a large percentage of the population is employed in the retail sector with significant percentages employed in educational services, public administration, agriculture, construction, and manufacturing of non-durable goods. By enhancing the downtown retail sector (discussed in the section on market niches), the City could draw from the strength of its local employment base.

#### **Consumer Expenditures**

Spending patterns and total demand for goods and services in the area can be estimated by computing the expected expenditures of the market area population; comparing the residents actual expenditures to the expected expenditure patterns; determining how much of the actual spending is "leaking" away to other commercial areas and how much is being "captured" by the City from other areas; and assessing the need for additional or intensified use of downtown commercial space based on the assumption that downtown businesses can capture some of the leakage.

Since there is a time lag in the reporting of data by the State Board of Equalization and the U.S. Bureau of Labor, the information presented in the following analysis will focus on 1993. Where more recent data is available, it will be presented as supporting material.

#### **Potential Local Expenditures**

Assessing the ability of Dixon consumers to support additional or intensified commercial development in the downtown area begins with determining the total income of the market area population. The market area income represents the total amount of money local consumers earn each year. Naturally, not all of the local residents' income is spent within the City, and there certainly are dollars spent within the City by non-residents; however, for the purposes of this analysis, we unrealistically assume that residents spend 100% of their total income within the City and that there is no outside infusion of spending. This will allow us to identify how various areas of the local economy are performing. As noted earlier, for purposes of this discussion, the market area has been defined as the City of Dixon.

To compute the total market area income, the population is multiplied by the per capita income for the City. In 1993, the population for the City was about 11,800 people and the per capita income was about \$16,186 (based on inflating the 1990 Census per capita figure by the consumer price index). By multiplying these two figures, a total income for the City of about \$191 million was derived.

Having derived the total income, a determination was made as to the spending patterns of the residents. The Bureau of Labor Statistics (BLS) conducts a survey of consumer expenditures regarding the buying habits of households. The results of the survey are published in annual reports that provide a categorical breakdown of average consumer expenditures. In addition, the State Board of Equalization (SBE) summarizes taxable retail expenditures for various business types and reports the data quarterly. Although the data collected by the SBE only considers the taxable sales of a business (which in some cases, such as grocery stores, does not represent the total sales of the business), it does provide a good measure of the sales activity in a given area.

Information from the Bureau of Labor Statistics suggests that spending on non-discretionary items, such as housing, utilities, taxes and social security, comprises about 35% of consumers total spending. Of the remaining amount, about 43% is spent in the retail sector and about 22% is spent on services and other items. Based on these figures, the total retail spending for the City is estimated to be about \$81.5 million. Table VI-9 summarizes the percentage of income spent in each of the categories surveyed by the BLS and estimates demand for goods and services if the percentages are assumed to apply to Dixon today. We have also projected demand for the future population of Dixon if the City is "built-out" in accordance with the General Plan.

Table VI-9:
Estimated Demand for Consumer Goods and Services

	F 111	Estimated Demand		
Goods and Services	Expenditures as % of Income	Dixon 1993	Dixon at Buildout	
Food away from home	5.4%	\$10,313	\$17,76	
Alcoholic Beverages	0.9%	\$1,719	\$2,96	
Housing	20.5%	\$39,153	\$67,43	
Utilities	6.9%	\$13,178	\$22,69	
Household Furnishings	4.0%	\$7,640	\$13,15	
Apparel	5.5%	\$10,504	\$18,09	
Transportation New Autos	7.6%	\$14,515	\$25,002	
Transportation - Gas & Oil	3.2%	\$6,112	\$10,52	
Transportation - Other	7.0%	\$13,369	\$23,028	
Health Care	5.8%	\$11,077	\$19,080	
Entertainment	5.3%	\$10,122	\$17,436	
Personal Care	1.3%	\$2,483	\$4,277	
Miscellaneous - Retail	3.7%	\$7,067	\$12,172	
Miscellaneous - Other	14.0%	\$26,739	\$46,056	
Total Expenditures	100.0%	\$190,990	\$328,972	

Note: transactions in thousands of dollars.

Source: Bureau of Labor Statistic Consumer Expenditure Survey; Department of Finance, Dixon General Plan, Crawford Multari & Starr.

In addition to the information supplied by the BLS for consumer expenditures, the State Board of Equalization reports information on taxable expenditures for 12 retail categories. Using this information, an estimate of retail expenditures can be derived based on the assumption that the purchasing patterns of the City are similar to the expenditures of a larger region, such as Solano County. Table VI-10 shows the expenditures by retail category for Solano County, the per capita expenditure for the County, the potential per capita for the City, and the potential aggregate sales total. The per capita sales figures used for the City are lower than those for the County to account for the difference in per capita income.

Table VI-10: Estimated Demand for Taxable Goods by Outlet 1993				
Category	Actual Sales -S	Solano County	Market Potential - City of Dixon	
	Gross Sales Per Capita Sales		Per Capita	Total Sales
Apparel	\$111,319,000	\$299	\$282	\$3,323,616
General Merchandise	\$416,410,000	\$1,118	\$1,054	\$12,432,622
Specialty Stores	\$187,254,000	\$503	\$474	\$5,590,784
Food Stores	\$197,687,000	\$531	\$500	\$5,902,278
Packaged Liquor	\$11,949,000	\$32	\$30	\$356,758
Eating and Drinking	\$228,148,000	\$612	\$577	\$6,811,743
Home Furnishings and Appliances	\$89,512,000	\$240	\$226	\$2,672,532
Building Materials & Farm Implements	\$197,140,000	\$529	\$499	\$5,885,947
Auto Dealers & Auto Parts and Supplies	\$347,298,000	\$932	\$879	\$10,369,167
Service Stations	\$178,791,000	\$480	\$452	\$5,338,106
Other Retail	\$118,372,000	\$318	\$300	\$3,534,195
All Other Outlets	\$564,529,000	\$1,515	\$1,428	\$16,854,964
Total	\$2,648,409,000	\$7,108	\$6,701	\$79,072,711

Source: State Board of Equalization, Crawford Multari & Starr

#### **Actual Expenditures**

Table VI-11 outlines the taxable transactions for the City for the five years from 1989 to 1993. The table shows that after a modest gain from 1989 to 1990, the taxable retail sales for the City (in real dollars) have declined each year and have not returned to the 1990 level.

Table VI-11: City of Dixon - Taxable Transactions 1989 - 1993				
Year	Taxable Transactions	CPI Adjusted Total	Change from Previous Year	
1989	\$72,771,000	\$84,227,827	N/A	
1990	\$82,826,000	\$91,729,325	8.9%	
1991	\$84,608,000	\$89,761,787	-2.1%	
1992	\$86,649,000	\$88,959,640	-0.9%	
	\$81,746,000	\$81,746,000	-8.1%	

Source: State Board of Equalization; Crawford Multari & Starr

Despite the decline in recent years, Dixon businesses reported taxable sales of \$81.7 million for 1993; a figure that compares favorably to the estimates of \$79 million and \$81.5 million derived using BLS

and SBE data, respectively. Given how close these estimates are to the actual reported transactions, one may conclude that, despite the downturn in activity, the City is economically healthy.

However, simply comparing total taxable transactions may hide the true economic health of the community. The large volume of taxable sales activity originating from travelers on the I-80 may mask deficiencies in other areas of the economy, such as the retail sector. The activity from the freeway corridor makes it difficult to determine if the drop in taxable sales for the City is a result of a decline in retail activity in the City; an overall decline in the local or regional economy (income); changes in commuter or traveler patterns (i.e., a reduction in the traffic on the I-80 corridor); or the result of other unidentifiable factors.

The information summarized above reflects total expenditures within the City, but does not show the kinds of establishments where the dollars are being spent.

Table VI-12 compares the actual retail expenditures to the potential expenditures for each of the taxable categories reported by the SBE. Due to the small number of establishments in some of the categories, the SBE will not release data in these areas to avoid the disclosure of confidential information. As a result, to accurately compare the figures, the information was condensed into only 7 categories. Apparel stores, general merchandise stores, drug stores, packaged liquor stores, and home furnishings and appliances have been grouped under the "retail stores" category.

Table VI-12:  City of Dixon - Actual vs. Potential Taxable Sales								
Category Potential Sales Actual Sales Difference								
Retail Stores	\$24,376,311	\$14,185,000	(\$10,191,311)					
Food Stores	\$5,902,278	\$8,901,000	\$2,998,722					
Eating & Drinking Places	\$6,811,743	\$14,466,000	\$7,654,257					
Bldg. Materials & Farm Implements	\$5,885,947	\$3,478,000	(\$2,407,947)					
Auto Dealers and Auto Supplies	\$10,369,167	\$9,861,000	(\$508,167)					
Service Stations	\$5,338,106	\$6,723,000	\$1,384,894					
All Other Outlets	\$20,389,160	\$24,132,000	\$3,742,840					
Total	\$79,072,711	\$81,746,000	\$2,673,288					

Source: State Board of Equalization; Crawford Multari & Starr

The table shows that while the total of the actual expenditures exceeds the potential expenditures, there are large variations in the individual reporting categories. These differences represent the "leakage" and "capture" totals for the various categories and may provide information as to the kinds of uses that may be integrated into the downtown area (see the section on leakage).

In addition to the data supplied by the SBE, the City's finance department was able to provide general sales tax data on the businesses located downtown. The confidentiality factor becomes more important when gathering information on the downtown area since there may be only one or two businesses in a particular category. Therefore, businesses were grouped into three general categories for data collection purposes: retail/commercial, industrial services (such as automotive repair), and professional services (including personal services, such as hair salons). Despite the absence of specificity, some trends in the

sales tax revenue for downtown can still be observed. Table VI-13 shows the taxable sales data for the years 1990 - 1994.

Table VI-13: Sales Tax Revenues for Downtown Business 1990-1994 Retail/Commercial **Industrial Services** Year **Professional** Total Uses **Services** \$714 1990 \$46,569 \$4,965 \$54,238 1991 \$4,919 \$42,967 \$1,474 \$51,351 1992 \$39,437 \$3,642 \$47,222 \$2,151 1993 \$39,711 \$4,704 \$1,483 \$47,891 1994 \$38,007 \$4,365 \$1,707 \$46,073 % Change 1990-94 -18.4% -12.1% 139.1% -15.1%

Source: City of Dixon

Although there have been small fluctuations in the tax revenue collected for downtown businesses during the last five years, the overall trend has been a decline in both retail/commercial tax revenues, and taxes from industrial uses. It is important to note that the total sales tax revenue form downtown businesses has been declining and that retail sales tax revenue has declined the most. The \$8,165 decline in sales tax revenue represents over \$800,000 in lost sales income during the last 5 years. In contrast, taxes generated from professional uses has increased almost 1½ times since 1990. Although the dollar amount may not be significant, the increase in tax revenue in the professional category may be an indication of the types of uses transitioning into the downtown area.

## Leakage

The difference between the amount of money that local consumers have to spend and the amount they actually spend locally is known as "leakage". This measure is important because it provides an indication of how much money is available for capture by new commercial development. Based on the preceding analysis, the City is experiencing leakage in several areas including retail stores, auto dealers and auto supplies, and building materials & farm implements. In contrast, the City is "capturing" more than would be expected in several areas including food stores, eating and drinking places, service stations, and other retail outlets.

When one considers the location of these types of business within the City, these leakage and capture figures would seem to be reasonable. The City lacks a strong, identifiable retail center with a variety of apparel or general merchandise stores, and as a result is leaking dollars in these areas. Information from the SBE shows that there were only three permits issued for apparel stores and only one permit for a general merchandise store as of January 1, 1994.

Given the physical constraints of the downtown area, it seems unlikely that the downtown could compete for large retailers like those found in nearby Vacaville or Davis. But the amount of retail leakage suggests that there may be opportunities for smaller specialty retail stores. In addition, the data suggests that the City is experiencing leakage in the sales of building materials & farm implements. Although

these uses tend to require a large amount of space for retail activity, and are generally less attractive land uses for the downtown commercial core, there may be some opportunities for these establishments in the areas adjacent to the downtown core.

In contrast, the City has established Highway Commercial zones to cater to the traffic passing Dixon on I-80. These areas have establishments which provide services to the tourist and travelers including fast food and other restaurants, and gas stations. These areas are located where they are easily accessible from the access ramps and where they enjoy a high degree of visibility. Given the level of traffic on I-80, it is not surprising that these uses are capturing sales larger than would normally be expected. However, it is important to note that the large capture rates for these uses does not mean that there are not opportunities for these kinds of businesses in the downtown area, in particular eating and drinking establishments (this concept is explored further in the market "niche" assessment).

## Market "Niche" Assessment

The market for downtown consists primarily of residents in town and surrounding areas; students from the nearby schools; employees of the businesses located in and around the downtown core; and traffic traveling along Highway 113. Additional markets could evolve from the creation of visitor serving uses that generate an interest in the downtown or from the development of a regional transit stop downtown.

The preceding sections have focused on developing a demographic profile of the City and interpreting data related to the level of economic activity. This information is useful in defining the overall climate within which the downtown revitalization plan must function. Using this information, in conjunction with the proposed physical design changes to the downtown area, the following sections examine some of the possible businesses that could provide the impetus required to transform downtown into vital, vibrant area.

#### **Entertainment Facilities**

Given the close proximity of the downtown to the high school, and that approximately 34% of the population is under 19 years of age, perhaps the best opportunity for the revitalization of the downtown is the establishment of one or more family-oriented entertainment facilities, such as a theater, skating rink, or bowling alley According to BLS data, the 'average' consumer spends about 5.3% of their income on entertainment and consumer spending on entertainment increased 2% from 1991 to 1992, and 8% from 1992 to 1993. Based on the estimated expenditures outlined earlier, Dixon residents may spend in excess of \$10 million per year on entertainment.

One idea that seems to enjoy support in the community is the development of a new theater or renovation of the existing downtown theater. Since the nearest cinemas to the City are located in Vacaville and Davis, a market may exist for the development of a single screen theater, a novelty in today's marketplace of multi-screen cinemas. While it would be true that a multi-screen cinema would increase the level of activity in the downtown, the parking requirements and high level of visibility required by these complexes make the downtown an unlikely location choice.

While a single screen theater showing first-run movies may enjoy some success, particularly with younger audiences, one alternative may be the development of an 'art house' specialty theater. In addition to showing art films (films not typically distributed to the larger cinema chains), the theater could periodically show "classics" that have been re-released, or could feature films from specific

directors or films that have common themes. In addition, the theater could form partnerships with other theaters in nearby cities to host film festivals that may draw people from other areas to the downtown.

The benefit of incorporating a theater into the downtown revitalization effort is that it helps create activity in downtown during the traditional off-hours, evenings and weekends. In addition, as a market for the theater develops, the additional traffic generated from theater patrons may have a spill over effect on other businesses in the downtown, particularly the restaurants in the area. They may find it more profitable to extend their hours of operation, or to upgrade their facilities to entice patrons into their establishments. Thus, a theater or other entertainment use, provides the human activity spark to generate interest in the downtown.

## Restaurant and Specialty Retail

#### Restaurants

Based on business license data and a land use inventory of the downtown area, the dominant business use is restaurants and bars. Information provided by the City on new business licenses shows that majority of downtown restaurants have been in business for over five years. The relative longevity of these establishments suggests that there is a potentially strong market for these establishments in downtown.

Although information from the SBE suggests that the City is currently capturing more sales in eating and drinking establishments than would be expected, this data is skewed by freeway oriented businesses. There still appears to be some opportunity to capitalize on the strength of this sector of the downtown economy. Based on an informal survey of the downtown restaurants, most of the businesses reported that most of the sales occur during lunch. They report that the most of their clientele consists of workers in the downtown area and high school students. It seems reasonable to assume that if the amount of downtown activity in the late afternoons and early evenings could be increased through other business uses, the possibility may exist for the restaurants in the area to expand their dinner business.

Of all the businesses located downtown, restaurant businesses could probably benefit most from changes to the physical design of downtown. Design features that provide outdoor spaces for sitting and eating, such as the conversion of alleys to public places or the widening of sidewalks, will help to create additional activity and excitement in the downtown. Establishments that lend themselves well to outdoor seating, such as coffee houses or dessert shops, could be encouraged to locate in the downtown area.

## Specialty Retail

Based on the data from the State Board of Equalization, the City is experiencing significant leakage in the retail sales category. Leakage in this category suggests that the City may be able to support additional retail space by capturing dollars spent in other nearby cities. A recent analysis of the types of businesses located downtown identified only about 11 retail establishments. One revitalization niche for the downtown includes the attraction and retention of additional 'specialty' retailers.

The key to successful retailing in the downtown is the creation of a special shopping district that is unique and different from the rest of the shopping areas in the City. The downtown commercial core has advantages that could be enhanced to attract people to the area -- a pedestrian environment; a mix of

uses; street vitality; and a history. To re-create this kind of retail ambiance in today's marketplace would be virtually impossible and the City should capitalize on these assets whenever possible.

However, the downtown cannot compete with conventional shopping centers, such as the commercial area developing at Pitt School Road and I-80, for major chain stores as anchor tenants. The niche for downtown will be specialty stores, such as small book stores or focused apparel stores. The emphasis should be on customized merchandise, quality, and high levels of service. In addition, downtown retailers should organize common promotions designed to attract shoppers to the downtown area. These could include things such as sidewalk sales, late shopping hours one day per week, tie-ins with community wide events, etc.

## Office and Professional Uses

Sales tax and business license data from the City, presented earlier this section, indicated that there may a transition underway downtown from retail/commercial uses to uses that are more professional or service oriented in nature. These uses include banking and financial, personal care (such as hair and nail salons), and medical services. In general, these types of uses do not need large amounts of office. One revitalization niche might be to foster the location of future office uses in or around the downtown core. Small scale office buildings could be developed on the traditionally smaller downtown parcels or in existing buildings that lend themselves better to office development than retail/commercial uses, such as second floors. In addition, the area adjacent to the downtown has been zoned for Planned Mixed Use (PMU) which encourages the adaptive reuse of the older residential structures near downtown to office uses. If this option were to be pursued, the physical design features of the downtown plan would need to address the concerns of the business owners regarding the availability of parking for employees and patrons.

The concentration of offices in the downtown could provide additional traffic for local merchants at lunch time and after-work. If the downtown is successful in the pursuit of other strategies that generate evening activities (such as a theater or a weekly farmers market) the downtown working population may be encouraged to stay in the downtown area.

However, it should be noted that unlike other uses, the market for office space is unique because it is not a direct function of population. Rather, the office market is driven by the occupational composition of the community. As local economies transition from a manufacturing base to service and retail base, the demand for office space is expected to increase, since large amounts of office space are used by people dealing in services. One common sense way of considering the need for office space is based on the estimated increase in the employment in the area. As the total employment increases, some percentage of the population will be employed in occupations requiring office space.

#### **Special Events and Public Facilities**

Bringing life back to the downtown is a complex process. While changes to the physical design are important to the success of any revitalization effort, the key attraction for downtown will be the presence of human activity. Activities such as festivals, farmers markets, and other events should be encouraged to be held downtown. These events give people a reason to visit the downtown, and generate foot traffic and exposure for existing downtown businesses. As the physical design features of the revitalization plan are implemented, events that draw residents to downtown will allow them to see the physical changes underway, which in turn helps instill a sense of civic pride.

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In addition to holding special events, additional interest in downtown could be generated through the establishment of a public facility, such as a museum. The museum could involve some tie to the historical roots of the City, such as the railroad or agriculture, or it may be linked to some aspect of the larger regional area. If the City could place a sign(s) along the I-80 corridor informing travelers of the presence of a museum, it may result in additional tourist traffic downtown.

However, the location of a museum, or other public facility in the downtown area requires thoughtful consideration of the space needs for these kinds of uses. For example, a historical museum would require significantly less space than a railroad or agricultural machinery museum. For these types of museums to draw significant visitors, displays of large pieces would be required.

One location that may be suitable for this type of facility is the property to the northwest of the downtown core, and on the east side of the railroad tracks. The large structures currently in place on the property could be renovated or a new structure could be constructed to house larger museum pieces. Utilization of this property as a museum, along with the possibility of commuter rail stop located in this area, would help to connect this area with the revitalization efforts taking place in the downtown commercial core.

#### Other Markets

#### Industrial

As noted earlier, one of the goals of the City's general plan is to promote an expanding and increasingly diversified local economy. While much of the preceding discussions have presented data related to the revitalization of the commercial core of downtown, the development of industrial uses adjacent to downtown and within the larger project boundaries will expand employment opportunities for the local residents and contribute to the overall revitalization effort.

Although the General Plan does not designate any area within the core boundary of the revitalization project as general industrial (GI), the are properties near downtown that have been designated GI. In addition, a large area to the north west of downtown, across the railroad tracks, has been designated by the General Plan as service commercial. This designation allows a variety of activities ranging from small-scale commercial service establishments to larger operations of a semi industrial character. Development of industrial uses in this area, in conjunction with a commuter rail stop, could provide increased activity in the downtown area.

Based on data from ABAG, the General Plan estimates that employment within the City's Sphere of Influence could increase from about 3,600 in 1990 to about 7,580 by the year 2010. While the largest increases in employment are expected to occur in the retail and service sectors, ABAG estimates that employment in the manufacturing and wholesale sector could increase from about 620 in 1990 to about 1,510 by the year 2010. Growth in this part of the local economy suggests that there may be a demand for additional industrial space in the coming years. In addition, Dixon's proximity to major highway and rail regional transportation networks could be an advantage for industrial or wholesale businesses that may locate there. Although it is beyond the scope of this report, a complete market study for industrial uses in the area should be completed to fully assess the need for additional industrial space.

### Housing

As revitalization strategies for downtown are developed and implemented, the housing market in and around the downtown area will be a key factor in the ongoing success of those efforts. The following briefly discusses some of the factors that may affect the downtown housing market.

In 1993, the general plan estimated that the City had about 3,911 housing units and an estimated vacancy rate of about 4%. The provisions of Measure "B" (which is discussed earlier and does not apply to the Redevelopment Project area), could allow this total to rise by about 2,500 additional units by the year 2010. Based on the data presented earlier on commuting patterns, much of this increase could be attributed to Dixon becoming a "bedroom community" to other Bay Area/Sacramento metro communities.

The City's housing market is a mixture of older and newer homes. Most of the new residential construction is occurring in the northwest quadrant of the City. Based on conversations with local Realtors, prices for 3 bedroom/2 bath new homes range from about \$130,000 to about \$180,000. In contrast, the housing market downtown is comprised of older single-family structures. The selling prices for similarly sized units ranges from about \$110,000 to about \$140,000. About 150 new and existing units are sold per year within the City.

The housing preferences of current buyers moving into a bedroom community such as Dixon, seem to favor the design features found in newer residential neighborhoods. Although the downtown area has amenities not found in these newer areas, such as unique architectural design, established landscaping and tree lined streets, for many buyers these amenities do not offset the negative image associated with living downtown. As a result, the downtown housing market is largely comprised of rental units. Typically, rental units have not received the care and maintenance associated with owner occupied units. Therefore, strategies that seek to improve the desirability of living in the downtown area, including increasing the number of owner-occupied units, would contribute significantly toward the downtown revitalization effort.

In addition, as the City grows, there may be opportunities for the provision of housing units in or near the downtown area for special needs groups such as the elderly or low income households. By locating these units downtown, residents would have better access to the services they need on a regular basis.

Seismic Retrofit Analysis

# IV. Seismic Retrofit Analysis

## Introduction

Using the existing inventory of unreinforced masonry buildings, RRM Design Group has prepared the following report evaluating the type and magnitude of seismic upgrades required to maintain the identified buildings in Downtown Dixon.

The evaluation begins by providing an introduction of the different types of structural deficiencies and associated corrective measures. This is followed by an assessment of each building. Part IV identifies the anticipated scope of repairs and associated costs for each building while Part V outlines the steps required for the development of a seismic upgrade implementation program.

## Methods for Retrofitting

#### Introduction

The purpose of Methods of Retrofitting is to identify the structural deficiencies possible in an unreinforced masonry building and present an accompanying corrective measure. The structural deficiencies are due to the type of wall construction, a lack of structural component connections, and the general building design. Each deficiency and correction is categorized based on the primary building component (e.g., walls, floor, and roof diaphragms) that must be repaired or replaced to achieve a safe building under the guidelines of the State standards. Each of the deficiencies are referenced by a symbol which is repeated in Part III - Assessment of Needs.

#### **Definition of Terms**

Boundary Element - An element at edges of openings or at perimeter of shear walls or diaphragms.

Braced Frame - An essentially vertical truss system of the concentric or eccentric type which is provided to resist lateral forces.

Collector - A member or element provided to transfer lateral forces from a portion of a structure to vertical elements of the lateral force resisting system.

Concentrically Braced Frame - A braced frame in which the members are primarily subjected to axial forces.

**Diaphragm** - A horizontal or nearly horizontal system acting to transmit lateral forces to the vertical resisting elements. The term "diaphragm" includes horizontal bracing systems.

Diaphragm Chord - The boundary element of a diaphragm or shear wall which is assumed to take axial stresses analogous to the flanges of a beam.

Eccentrically Braced Frame - A steel braced frame designed in conformance with Uniform Building Code Section 2710(I).

Lateral Force Resisting Systems - The part of the structural system assigned to resist lateral forces.

Shear Wall - A wall designed to resist lateral forces parallel to the plane of the wall (sometimes referred to as a vertical diaphragm).

Strength - The usable capacity of a structure or its members to resist load within the deformation limits prescribed in UBC Section 2331 and other referenced sections.

Structure - An assemblage of framing members designed to support gravity loads and resist lateral forces.

# Identification of Structural Deficiencies Description of Corrective Measures

Walls					
Wall Type	Structural Deficiencies Corrective Measures				
W1	Unrestrained Masonry Walls at Roof Frami Masonry walls which are not laterally supported/braced by the roof diaphragm due to lack of mechanical anchorage to the roof framing members.	Provide mechanical anchorage from the masonry walls to the roof framing members.			
W2	Unrestrained Masonry Walls at Floor Framing  Masonry walls which are not laterally supported/braced by the floor diaphragm due to lack of mechanical anchorage to the floor framing members.  Provide mechanical anchorage from the masonry walls to the floor framing members.				
W3	Unreinforced Masonry Walls Unreinforced masonry walls with height to thickness ratios greater than those listed in the 1991 UCBC Table No. A-1-B.	Apply internal/exterior bracing members to the unreinforced masonry wall. These new members must span from floor-to-floor or floor-to-roof.			

Type	Structural Deficiencies	Corrective Measures	
D1	Straight Sheathed Diaphragms		
	1X straight sheathing (e.g., 1X6 or 1X8 lumber) installed perpendicular to roof or floor framing.	Replace the straight sheathing with plywood or provide new plywood sheathing over the top of the existing sheathing.	
D2	Lack of Roof Diaphragm Boundary Elements		
	Insufficient ties/chord members at the connection of the perimeter roof sheathing (horizontal diaphragm) to the walls.	Provide mechanical strapping/splices and additional roof framing members as required to provide continuous diaphragm chord members	

D3	Lack of Floor Diaphragm Boundary Elemen	nts		
	Insufficient ties/chord members at the connection of the perimeter floor sheathing (horizontal diaphragm) to the walls.	Provide mechanical strapping/splices and additional floor framing members as required to provide continuous diaphragm chord members.		
D4	Lack of Collector Members			
	Horizontal framing members which transfer lateral loads to the vertical lateral force resisting elements (e.g., shear walls or braced frames) are missing.	Provide mechanical strapping/splices and new framing members as required to provide collector members to the vertical lateral force resisting elements.		

Later	al Load Resisting Systems	·		
Type	Structural Deficiencies	Corrective Measures		
L1	Inadequate Shear Walls			
	Inadequate length of shear walls to laterally brace the building	Provide additional shear walls or braced frames in the structure to resist lateral forces.		
L2	Inadequate Unreinforced Masonry Shear W	alls		
	Inadequate shear capacity of unreinforced masonry shear walls to laterally brace the building	Provide additional shear walls or braced frames in the structure to reduce the lateral load to the existing masonry walls.		
L3	Discontinuous Shear Walls			
	Shear walls which are not continuous from story to story.	Provide a new shear wall, add to the existing shear wall or replace the existing shear wall such that a continuous shear wall is constructed from the roof framing to the foundation level.		
L4	Torsional Irregularity			
	A lack of a lateral bracing element on one or more sides of the building.	Add new shear walls or braced frames to provide a lateral bracing element on the weak/unbraced side of the building.		
L5	Inadequate Prevention Against Overturning			
	Inadequate/non-existence of boundary elements within an existing shear wall to prevent it from overturning.	Add vertical rebar or steel to the shear wall to form a boundary member.		

Fallir	ng Hazards		
Type	Structural Deficiencies	Corrective Measures	
F1	Unbraced Parapets		
	Unbraced parapets with height to thickness ratio's greater than 1.0	Laterally brace parapets with crickets or diagonal bracing back down to the roof framing members.	
F2	Unanchored Roof Mechanical HVAC Equipment		
1.2	Roof mounted mechanical equipment or equipment platforms which are not mechanically fastened to the structural system.	Provide mechanical anchorage to the roof framing members.	
F3	Unattached Architectural Appendages		
	Architectural elements which are not adequately attached to the structural system of the building.	Provide positive mechanical anchorage of the architectural elements to the structural system or remove the appendages.	

## Assessment of Needs

#### Introduction

A per building assessment of current conditions was implemented for buildings listed on the inventory of the unreinforced masonry buildings within the downtown as prepared by the City of Dixon Building Department. The assessment encompasses a general review of each building identifying structural composition, building materials, current occupancy use, square footage, and the number of stories. In some cases there were portions of the buildings which could not be observed (attics, roof, basements) because they were not readily accessible. In this event the judgment of conditions were based on historical data of similar structures. Because this report is limited to the initial assessment only, a definitive structural analysis and design will be required to be prepared for each building for implementation. This report will lead to the need for additional investigations, measurements, and material testing report.

The information gathered in this initial assessment is categorized into one of the following areas and represents the basis for determining the appropriate method of repairs.

## Assessment Categories:

- Walls
- Floor and Roof Diaphragms
- Lateral Load Resisting Systems
- Falling Hazards
- Additional Life Safety Concerns Observed

# Assessment of Inventoried URM Buildings

Stru	ctural Deficiency Outline	Probability of Occurrence
Wall	Туре	Legend
	Unrestrained Masonry Walls at Roof Framing Unreinforced Masonry Walls at Floor Framing Unreinforced Masonry Walls r and Roof Diaphragms	Not an Issue  Not Observed - No Deficiency Anticipated  Not Observed - Defeciency Anticipated  Observed - Known Deficiency
D1	Straight Sheathed Diaphragms	
D2	Lack of Roof Diaphragm Boundary Elements	
D3	Lack of Floor Diaphragm Boundary Elements	
D4	Lack of Collector Members	
Late	ral Load Resisting Systems	
L1	Inadequate Shear Walls	
L2	Inadequate Unreinforced Masonry Shear Walls	
L3	Discontinuous Shear Walls	
L4	Torsional Irregularity	
L5	Inadequate Prevention Against Overturning	
Falli	ng Hazards	
F1	Unbraced Parapets	
F2	Unanchored Roof Mechanical HVAC Equipment	
F3	Unattached Architectural Appendages	

Bldg.	Address/APN	Occupancy	Stories	Area (sf)	
A	100 South First St.	Restaurant @ 1st	2	Bldg	Site
	114-0540-004	Assembly @ 2nd		6,000	5,589

Two story URM structure with two story wood framed addition. The URM structure has an exterior stucco finish, built-up flat roof, hollow clay tile interior walls and partial basement. The wood framed addition is finished with corrigated metal siding.



#### **Assessment Matrix**

1133C33IIICIIC IVIACI	IA.				
Walls	$\mathbf{W1}$	W2	W3		
	•	•	0		
Floor/ Roof	D1	D2	D3	<b>D</b> 4	
Diaphragms	•	•	•	•	
Lateral Load	L1	L2	L3	L4	L5
Resisting	0		0		0
Systems					
Falling Hazards	F1	F2	F3		
	0	$\Theta$	•		

#### Notes

Straight sheathing was observed inside the building. The roof framing appeared to be 2X8 trusses at 2'-0" O.C. Hollow clay tile were used to form interior walls. No perimeter pilasters were evident.

The parapet is braced with crickets.

There was no evidence of floor or roof to wall ties.

A single line of columns were observed below in the basement and supporting the upper floors.

The architectural features on the exterior may require attachment to the structure.

The shear walls appear to be of adequate length on side elevation with a lack of bracing evident on the front elevation.

Bldg	Address/APN	Occupancy	Stories	Area (sf)	
В	140 West A St.	Optometrist Office	1	Bldg	Site
	114-0540-004			1,800	2,100

#### **Building Description**

Single story URM building, rectangular in shape. Some original openings have been filled in with brick. The building has a basement.

#### Assessment Matrix

Assessment Wat.	LIX			
Walls	W1	W2	w3	
Floor/ Roof Diaphragms	D1	D2	<b>D3</b>	<b>D4</b>
Lateral Load Resisting Systems	L1	L2 <del>=</del>	L3	L4 L5
Falling Hazards	F1	F2 ⊖	<b>F3</b>	



#### **Notes**

Wall thickness = 12 3/4"

Wall ties on two sides of building at 8'-0" O.C. No ties at the front or rear of the building. Spacing and fastening of ties to (E) roof framing are questionable - Ties should probably be spaced at 4"-0" O.C. Unable to observe actual bolted/nailed connection to framing members.

Based on location of wall ties, approximately 2/3rds of height of wall, building appears to have tall unbraced parapets. Building appears to have adequate length of brick wall to act as shear walls.

Possible problem of inadequate protection against overturning at front and rear walls

Bldg	Address/APN	Occupancy	Stories	Area (sf)	
C1	105 North First St.	Restaurant . 1 Bl		Bldg	Site
•	113-055-011			2,800	2,944
C2	111 North First St.	Retail	ĺ		
	113-055-010			3,400	3,536
<b>C3</b>	119 North First St.	Restaurant	1		
	113-055-009			2,700	2,700



Single story URM with multiple tenants.

Walls	W1	<b>W2</b>	w3	
Floor/ Roof Diaphragm	D1	D2	D3	<b>D4</b>
Lateral Load Resisting Systems	L1	<b>L2</b>	L3	L4 L5
Falling Hazards	F1	F2	F3	

#### **Notes**

Wall thickness appears to be about 12 3/4" plus a plaster coat for a total of 14".

Building appears to have hardware device penetrating ext. walls at roof line at 8'-0" O.C. - These, however, are not/will not function as wall ties.

Roof line appears to be at 15' with a 6'-0" tall unbraced parapet.

Wall height to thickness ratio appears to be right at the limit before having to reinforce walls.

There appears to be insufficient wall at the front of the building for lateral bracing - additional bracing is likely required. South and West walls appear to have adequate length for lateral bracing. Unable to observe North wall due to adjacent building.

Bldg	Address/APN Occupancy		Stories	es Area (sf)	
D	127 North First St.	Restaurant	2	Bldg	Site
	113-055-008			5,000	2,640

# **Building Description**

Two story URM with tall architectural parapet at the front elevation. Currently occupied by the Oak Restaurant.

## **Assessment Matrix**

Assessment Matrix					
Walls	W1	W2	<b>W3</b>		
Floor/ Roof	D1	D2	D3	D4	
Diaphragms	$\ominus$	$\Theta$		0	
Lateral Load	L1	L2	L3	L4 L5	
Resisting				• •	
Systems					
	F1	F2	F3		
Falling Hazards		$\Theta$	$\Theta$		



#### **Notes**

Unable to measure wall thickness due to adjacent structures. No wall to roof or floor ties exist/are visible at the front and rear of the building.

Unbraced parapet is visible at the front of the building. Wall height to thickness do not appear to be a problem since walls could be braced at mid-height.

Building is lacking lateral bracing at the front elevation. It is questionable whether there is adequate length of shear wall to brace the back of the building. The shear capacity may be a concern. Boundary elements at shear "piers" are non-existent.

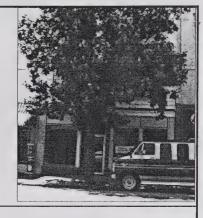
Strong possibility that roof mounted HVAC equipment is not attached to structure and that signage at front needs additional strapping to the building

Bldg	Address/APN	Occupancy	Stories	Area	a (sf)
E	155 North First St.	Vacant Retail	2	Bldg	Site
	113-055-006			5,600	2,920

Two story URM building. Superficial exterior work has been done over the brick. An addition has been added at the back of the building.

#### **Assessment Matrix**

Walls	W1	W2	<b>W3</b>	
Floor/ Roof Diaphragms	D1 (=)	D2 =	D3 ⊕	<b>D4</b>
Lateral Load Resisting Systems	L1	L2	L3	L4 L5
Falling Hazards	F1	F2	F3	



#### Notes

Building has had an addition done at the rear/alley. Access to original brick is from the inside of the building only. Extent of original block wall/piers (height and width) is unknown. Front of the building has had a "face-lift". Horizontal siding has been placed over the brick so the brick can not be observed. No lateral bracing exists at the front facade of the first story. Unable to observe any wall ties due to newer improvements and construction covering brick.

Based on observations of other buildings of this period there is a strong possibility that there is inadequate floor/roof to wall ties

Strong possibility that the parapet is unbraced and roof mounted HVAC equipment is not secured to the structure.

Bldg	Address/APN	Occupancy	Stories	Area (sf)	
F	159 North First St.	Masonic Lodge @ 2	2 2	Bldg	Site
	113-055-005	Retail @ 1st.		11,500	4,280

## **Building Description**

Two story URM building with assembly space on the second floor and retail on the first. Partial basement.

#### **Assessment Matrix**

Walls	W1	W2	<b>W3</b>	
Floor/ Roof Diaphragms	D1	D2	D3	D4
Lateral Load Resisting Systems	L1	L2	L3	L4 L5
Falling Hazards	F1	F2	<b>F3</b>	



#### Notes

Unable to access building second floor.

Wall thickness appears to be 12 3/4".

First floor tenant states that the sidewalls are several feet thick. Unable to verify. A basement exists under a portion of the building with brick bearing retaining walls. Access to basement was not available.

First floor height appears to be 16'. Wall ties exist at second floor line and roof line. Spacing and adequacy not confirmed. Unable to observe actual wall tie to framing member connection.

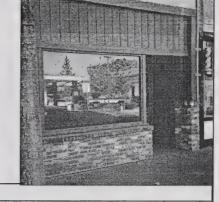
Mortar at the building rear is cracking and needs to be repointed.

Bldg	Address/APN	Occupancy	Stories	Area	(sf)
G	175 North First St.	Office	1	Bldg	Site
	113-055-004			1,550	1,748

Single Story URM building with brick and wood siding front facade.

#### **Assessment Matrix**

Walls	W1	W2	<b>W3</b>		
Floor/ Roof Diaphragms	D1 <del>=</del>	D2	D3	D4	
Lateral Load Resisting Systems	L1	L2	L3	L4 L5	)
Falling Hazards	F1	F2	F3		



#### Notes

Unable to measure sidewall thickness due to adjacent

Building G and H have had a common addition/extension done at the rear of the building. Added back wall is 8" CMU. The roof slopes (shed roof) from the original brick wall to the new CMU wall. The original brick wall appears to have a 3' parapet at the addition.

Based on the scupper locations at the building front, the building appears to have a 5'-6' high parapet.

The building lacks lateral bracing at the front facade.

No wall to roof ties are visible.

Bldg	Address/APN	Occupancy	Stories	Area	(sf)
H	183 North First St.	Barber Shop	1	Bldg	Site
	113-055-003			1,680	1,710

#### **Building Description**

Single Story URM building with plaster and tile front facade.

#### **Assessment Matrix**

Walls	W1	<b>W2</b>	<b>W3</b>	
Floor/ Roof Diaphragms	D1	D2	D3	<b>D4</b>
Lateral Load Resisting Systems	L1	L2	L3	L4 L5
Falling Hazards	F1	F2	F3	



#### Notes

Unable to measure sidewall thickness due to adjacent buildings.

Building G and H have had a common addition/extension done at the rear of the building. Added back wall is 8" CMU. The roof slopes (shed roof) from the original brick wall to the new CMU wall. The original brick wall appears to have a 3' parapet at the addition.

Based on the scupper locations at the building front, the building appears to have a 5'-6' high parapet.

The building lacks lateral bracing at the front facade.

Possible falling hazard - facade has tile up the sides and over the storefront glazing.

No wall to roof ties are visible.

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Bldg	Address/APN	Occupancy	Stories	Area	a (sf)
I	201 North First St.	Bank	1	Bldg	Site
	113-056-006			3,000	8,812



One story URM with high unbraced parapets. Stucco has been placed over original brick exterior finish.

#### **Assessment Matrix**

Walls	W1	<b>W2</b>	<b>W3</b>	
Floor/ Roof Diaphragms	D1	D2	D3	D4
Lateral Load Resisting Systems	L1	L2	L3	L4 L5
Falling Hazards	F1	F2 <b>⊖</b>	F3	

#### Notes

The building lacks lateral bracing at street facades. No wall to roof or floor ties were evident.

Straight trusses (built-up trusses with tie-rod connections) align with the front elevation. Lack of lateral bracing of framing systems was evident.

The parapet details may be inadequately attached architecturally appendages.

Bldg	Address/APN	Occupancy	Stories	Area	(sf)
J	170 West B Street	Retail	1	Bldg	Site
	113-056-008			900	1,000

## **Building Description**

One story URM building with exposed brick front facade and newer storefront glazing system. Currently occupied by Body Works Tanning Salon.

#### **Assessment Matrix**

Walls	W1	W2	W3	
Floor/ Roof Diaphragms	D1	D2	D3	D4
Lateral Load Resisting Systems	L1	L2	<b>L3</b>	L4 L5
Falling Hazards	F1	F2 ⊖	<b>F3</b>	

#### Notes

Roof framing is not visible above suspended ceiling due to original lath and plaster ceiling.

Wall thickness appears to be 12".

Steel brackets can be seen extending from brick at the front and back of the building, but they do not function as wall ties. The building appears to have unbraced parapets at both the front and back of the building.

No lateral bracing elements at the front of the building. Wall elements at the back of the building are more like pier elements than wall elements and will try to brace building as a combination of bending and shear. Lack of boundary elements may be a concern.



Bldg	Address/APN	Occupancy	Stories	Area	a (sf)
K	156-160 North 1st St.	Offices	2	Bldg	Site
	113-056-006			5,000	5,075

Two story URM with plastered facade and tall architectural parapet.

## **Assessment Matrix**

Walls	W1	W2	<b>W3</b>		
Floor/ Roof Diaphragms	D1 <del>=</del>	D2 <del>=</del>	D3	<b>D4</b>	
Lateral Load Resisting Systems	L1	L2	L3	L4	L5
Falling Hazards	F1	F2	F3		

#### Notes

Did not observe any wall ties.

No lateral bracing at front of building first floor.

Back walls and second story front wall will act more like pier elements than wall elements and will try to brace building as a combination of bending and shear. Lack of boundary elements may be/is a concern.

High unbraced parapet/architectural appendage at the front of the building.

Large wood deck at the second story at the rear of the building.

Bldg	Address/APN	Occupancy	Stories	Area	(sf)
L	116 North First St.	Offices	2	Bldg	Site
	115-082-005			12,500	6,591

### **Building Description**

The Old Dixon Hotel is a two story URM building at the corner of East A St. and North First St. The roof is built-up with parapets and all sides. The street frontages are finished with stucco.

## **Assessment Matrix**

Walls	W1	W2	<b>W3</b>	
Floor/ Roof Diaphragms	D1	D2	D3	D4
Lateral Load Resisting Systems	L1	L2	L3	L4 L5
Falling Hazards	<b>F1</b>	F2 ⊖	F3 ⊖	

#### Notes

A new roof has been braced into the old walls. The roof slopes to the rear of the building.

The parapets have been braced as part of the roof work.

The building has a basement of limited area.

There was no evident of floor or roof to wall ties. The roofing tiles on the parapet may be a falling hazard.

There may be inadequate shear walls along the front elevation although the length of the sidewalls appear to provide adequate shear in that direction.



## Anticipated Scope of Repairs and Associated Costs

#### Introduction

Utilizing the Building Assessment presented in Part III and the Methods of Retrofitting identified in Part II, Anticipated Scope of Repairs provides a per building analysis targeting a specific corrective measure to the identified deficiencies in each building. The impact of the repair to the historical value of the building is reviewed, as well as the possible impact to the user during the implementation of the repairs. Recommendations are made for the correction of life/safety code violations (e.g., inadequate exiting) which require correction as a part of the structural upgrade.

The Estimate of Probable Costs was prepared using historical data from structural upgrades of similar unreinforced masonry buildings. The costs are evaluated on a per square foot basis and consider the type of repair and impacts generated from repairs necessary to meet life/safety building code requirements. The "Inventory of Potentially Hazardous Building in the City of San Luis Obispo" report, dated July 27, 1995 was used a reference in establishing the estimated costs.

# Building Analysis / Scope of Repairs Matrix

	Building Address	Anticipated Repairs	Opinion of Probable Costs	Impact - Historic/ User	Observed Life Safety Concerns
A	100 South First St.				
		-Plywood sheathing -Wall ties -Braced frame @ front elevBrace arch. appendages -Plywood diaphragm	\$32.00/S.F.	Local historic value in exterior architectura l features	Lacks adequate exiting from the second floor
В	140 West A St.				
		-Wall ties -Chord members -Braced parapet -Plywood diaphragm	\$15.00/S.F.		
C	105, 111 and 119 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets	\$17.00/S.F.		
D	127 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevPossible braced frame at rear -Braced parapet	\$25.00/S.F.		Lacks adequate exiting from the second floor.

	Building Address	Anticipated Repairs	Opinion of Probable Costs	Impact - Historic/ User	Observed Life Safety Concerns
E	155 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets	\$27.75/S.F.		Lacks adequate exiting from the second floor.
F	159 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets -Repoint mortar joints	\$30.00/S.F.		Lacks adequate exiting from the second floor.
G	175 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets	\$15.00/S.F.		
H	183 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets -Remove or re-adhesive	\$20.00/S.F.		
I	201 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets -Secure arch. appendages	\$25.00/S.F.	Local historic value	

	Building Address	Anticipated Repairs	Opinion of Probable Costs	Impact - Historic/ User	Observed Life Safety Concerns
J	170 West B St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets -Shear pier chords at the rear of the building	\$15.00/S.F.		
K	156-160 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevBraced parapets -Shear pier chords at the front second story and back two stories	\$25.00/S.F.		Lacks adequate exiting from the second floor.
L	116 North First St.				
		-Wall ties -Plywood diaphragm -Chord members -Braced frame @ front elevre-attach roofing tiles	\$30.00/S.F.	Local historic value	Lacks adequate exiting from the second floor.

## Implementation Program

## Introduction

There are key issues which require consideration in the establishment of an Implementation Program for the improvement of unreinforced seismic buildings. The issues include the following:

- Recognition of key buildings and the establishment of priorities
- Building specific studies
- Incentive program for building specific studies
- Funding programs

Based on the information gathered and decisions made through these steps, the community can establish the priorities and the direction toward redevelopment.

## **Implementation Program**

## Establish Redevelopment Priorities

The establishment of priorities in the implementation of an unreinforced masonry building mitigation program includes the consideration of the following issues:

- Community recognition of key buildings and how the upgrade of a specific building fits in with other community goals.
- Recognition of historic buildings for potential tax credits.
- Identification of key buildings which would qualify for Federal funding for facade improvements.
- Identification of key mixed-use buildings which could promote the increase of housing opportunities within the City core. (Housing credits for redevelopment.)
- Identification of key buildings which represent the maximum risk to life and safety (highest occupancy, for example).

The establishment of community-based priorities leads the way to assigning a timetable for required retrofits and on to the next phase of the Implementation Program, the Building Specific Study.

## **Building Specific Studies**

The structural analysis and preparation of retrofit solutions and costs is a comprehensive survey and analysis which documents the exact building systems, structure, and quality of materials. This information typically includes the floor plans, elevations, structural systems, location of all plumbing and mechanical systems, and the documentation of architectural detailing. The exposure of existing structural systems and the coring and testing of existing structural materials is one component of this analysis. The recommendations made in the upgrading design are used as a basis for an analysis of costs and to quantify the impact on the occupant, public, and historic resources. The benefit of an evaluation and cost estimate program is to develop an accurate overall cost for retrofit of the downtown core to be able to look at combined funding options such as the establishment of an assessment district. The report should also identify life safety issues. The architectural/engineering costs of structural analysis and material testing usually ranges between 10% and 20% of the upgrade costs.

## Incentive Program for Building Specific Studies

There are several types of incentive programs for Building Specific Studies which have been implemented in cities throughout California. The incentives can range from Building Department waiver of review fees, crediting the cost of the preparation of the structural analysis against the future building permit fees to grants which off set the architectural and engineering fees.

## **Funding Programs**

The construction funding for the structural upgrade of unreinforced masonry structures is available through a variety of sources. The most successful sources of funding have come from the establishment of special districts, loan subsidies, and public/private partnerships.

## They include:

• Indirect City/Agency assistance

Absorbing permit costs

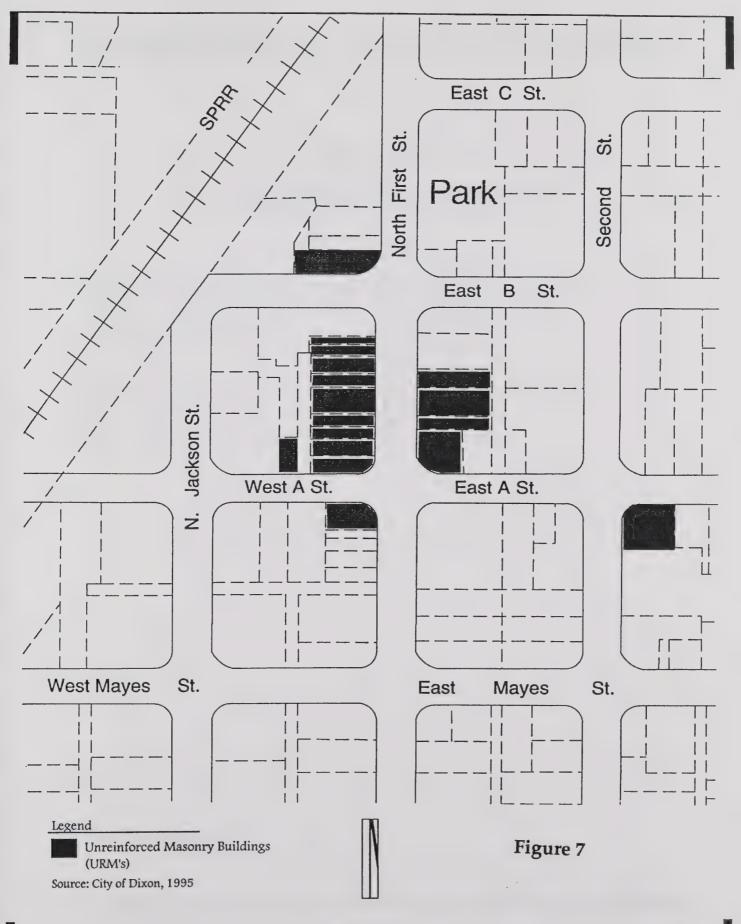
Bonus density credits

Assistance in tenant relocation

City/Agency leases office space in the rehab space

- Block Grants To provide direct State funding of full or partial retrofit costs
- State Housing and Community Development Loan Programs based on use or occupancy of the building after the retrofit is complete.
- Mello-Roos Bonds / Special Assessment financing keyed to property value to add to private financing keyed to building cash flow

The development of a Seismic Retrofit Mitigation Program has typically been led by a team of individuals including the Chief Building Official, Community Development Director, an architect, structural engineer, and City Manager. Upon the design of the program concepts, community meetings are typically held to present the ideas to the tenants and property owners. The most successful programs are clearly articulated, simple to implement, and through a system of prioritizing, offers owners flexibility allowing them to retrofit incrementally over time.



City of Dixon

Downtown Revitalization Plan

Appendix

## Appendix A

Non-Residential Buildings that Meet Criteria for Inclusion on The National Registry of Historic Places

#### Structure Location West E and North Jackson Streets California Mealfalfa Company Warehouse Silveyville Lodge R D & A.M. No. 201 165 North First Street 158 North First Street C.D. Schulze Jeweler Building 100 First Street Montezuma Lodge No. 172 135 East B Street Dixon Public Library 105 South Second Street Catholic Church Oliviera Signs Building 190 South Jefferson Dixon United Methodist Church 340 West B Street 140 First Street Dixon Theater Barbara's Women's Store Building 120 North First Street

# Appendix B

## Forming a Business Improvement District

The first step in forming a BID would be to establish an advisory committee representing businesses in the area. This committee would help the staff and Council with the various policy issues that formation of the BID poses.

Next, the City needs to define the district boundaries. Once the boundaries are decided, the method and amount of assessment should be preliminarily developed. It is not necessary to charge all businesses the same assessment. Rather, assessments can be structured to take into account location, size, and type of business. Generally speaking, the amount of the assessment should have some relation to the likely benefit enjoyed by the business. For example, the assessment on restaurants and retail should probably be higher than for office/professional businesses; assessments on large businesses could be higher than on small ones.

After the boundaries and preliminary assessment structure is devised, the projected total income can be estimated. It is important to take this step early to see if the size of the district and the amount of assessments which seem acceptable will generate enough money to make the BID worthwhile. In light of the estimate of income, the City and advisory committee should consider what kinds of activities are desired and whether or not the budget is realistically sufficient to implement them over time. The process of developing the assessment structure and formulating a list of programs that could be tackled by the BID is likely to be iterative...that is, different assessment structures and work programs will need to be formulated and considered before a final recommendation is reached. For example, the assessments may need to be increased to raise sufficient money to do some meaningful activities and/or the scope of the work program may need to be reduced to reflect the amount of money that can be realistically raised through this method.

At this point, the City and committee will have prepared the following: the boundaries of the district, the assessment formula, an expected annual income, and a preliminary work program indicating how the money will be spent.

One or more public meetings should be held and all businesses which could be affected should be invited. The purpose and benefits of the district need to be understood and supported by a majority of the businesses.

The City Council would then adopt a resolution of intent to form a BID and notices for a public hearing. Businesses may protest the assessment. If protests are received from businesses which together would pay more than 50% of the overall assessment, the district can not be formed and another effort may not be instituted for at least one year. Businesses must protest in writing, and may withdraw their protests any time up to the end of the public hearing.

If a protest is not sustained, the City Council can adopt the BID by ordinance after the public hearing.

Assessments are collected by the City.

## **Organization**

If a BID is formed, the City Council must appoint an Advisory Board which will make recommendations on the use of the money and other matters related to the district. The Board can be limited to representatives from the member businesses. In some cities, the businesses hold elections to name representatives; a board created this way must still be approved by the City Council.

Each year the Board prepares a report covering the expected income for the upcoming year and activities that the money will be used for, among other items. The Council then adopts a resolution of intent to levy the annual assessment and thereafter holds a public hearing. Businesses may protest the annual assessment. The Council may accept the recommendation of the Board, or modify it as deemed appropriate.

Most successful BID's have some professional staff. At least some part-time staff is strongly recommended although this may not be possible under current conditions. Some cities provide additional support to BID's from their general funds either directly or through assistance from city staff, especially as BID's are starting up. However, the goal of most cities is to have their BID's self-supporting in the long run.

### Work Program

The most important function of most BID's is coordinated promotions. This can be in many forms, including advertising, special events, aesthetic improvements (such as banners, flower boxes, etc.) and so on. Other related activities relevant to Downtown could include the development of a tram connecting the remainder of the City with Downtown. The BID Advisory Board and the BID staff must develop an annual program, outlining the activities to be funded by the assessments.

# **Report Preparation**

The following people worked on this Plan:

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## RRM Design Group

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